

In the Claims:

1. A superconducting filter apparatus comprising:

a superconducting filter that exhibits a prescribed pass-band characteristic when cooled to cryogenic temperatures;

a refrigerator for cooling said superconducting filter to cryogenic temperatures;

a pilot signal generator for generating a pilot signal that is outside said pass band and inputting said pilot signal to the superconducting filter together with an antenna receive signal; and

a discriminating unit for discriminating abnormality in the refrigerator based upon the level of the pilot signal contained in a signal that is output from the superconducting filter, and

wherein said pilot signal generator generates two pilot signals having different frequencies and inputs the pilot signals to said superconducting filter, and said discriminating unit detects the level of each pilot signal and judges extent of the abnormality based upon the waveforms of each of the detected levels

Claims 2-5 were previously withdrawn.

6. (Cancelled)

7. A wireless receiving amplifier for amplifying a signal of a prescribed band in a signal received by an antenna and outputting the amplified signal, comprising:

a superconducting filter that exhibits a prescribed pass-band characteristic when cooled to cryogenic temperatures;

a low-noise amplifier for amplifying a signal that is output from the superconducting filter;

a refrigerator for cooling said superconducting filter and low-noise amplifier to cryogenic temperatures;

a pilot signal generator for generating a pilot signal that is outside said pass band and inputting said pilot signal to the superconducting filter together with an antenna receive signal;

~~and~~

a discriminating unit for discriminating abnormality in the refrigerator based upon the level of the pilot signal contained in a signal that is output from the low-noise amplifier; and

wherein said pilot signal generator generates two pilot signals having different frequencies and inputs the pilot signals to said superconducting filter, and said discriminating unit detects the level of each pilot signal contained in the signal that is output from the low-noise amplifier and judges extent of the abnormality based upon the waveforms of each of the detected levels.

Claims 8-10 were previously withdrawn.

11. (Cancelled)

Claims 12-13 were previously withdrawn.